

### Abstract

A torch is moved by a manipulator in a direction separating from a base material 7 while a wire is supplied, whereby an actuator driving the robot manipulator can control a velocity of the wire for a workpiece by a unidirectional operation of separating the torch, and vibration due to reverse of torch velocity is not generated. Further, by using a 5 dedicated separation control system, velocity follow-up performance of the actuator moving the torch can be heightened without increasing overshoot in the usual operation time, and the acceleration and deceleration time of the manipulator can be reduced.